



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,462	11/07/2003	Sang Kyun Lee	P23471	8284

7055	7590	05/02/2007
GREENBLUM & BERNSTEIN, P.L.C.		
1950 ROLAND CLARKE PLACE		
RESTON, VA 20191		

EXAMINER	
CHEEMA, UMAR	

ART UNIT	PAPER NUMBER
2109	

NOTIFICATION DATE	DELIVERY MODE
05/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary	Application No. 10/702,462	Applicant(s) LEE ET AL.	
	Examiner Umar Cheema	Art Unit 2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement filed 24 February 2004 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. However the examiner did review the two applications disclosed by applicant.

Claim Objections

3. **Claim 6** is objected to because of the following informalities: Claim 6 recites "comparator/determinator"; examiner is unable to determine which one to consider for the claim examination. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Art Unit: 2109

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claim 1-7, 8,10-11** are rejected under 35 U.S.C. 102(e) as being anticipated by Heitkamp et al (US 6,970, 961).

7. Regarding **claim 1**, Heitkamp et al teach a network system connected with multiple master devices (title, abstract), comprising: a plurality of slave devices connected to a network that transmit and receive data through the network (abstract, fig. 2); at least one master device that is configured to receive a control command from a network manager and to output state information in response to the control command to control the slave devices (abstract, col. 1, lines 28-35); and a network manager that automatically assigns a network address to the at least one master device to connect the at least one master device to the network when the master device is one of newly connected to the network and additionally connected to the network with which an existing master device is connected (abstract, col. 1, lines 40-51).

Art Unit: 2109

8. Regarding **claim 2**, Heitkamp et al teach the network system as set forth in claim 1, wherein the network manager comprises: a master-device discriminator that determines whether the at least one master device is newly connected to the network and that determines whether a unique address is associated with the at least one master device (col. 1, lines 28-35, 42-51, col. 2, lines 16-24); a search packet transmitter (col. 3, lines 34-44) that generates a search packet for searching for the unique address associated with the at least one master device and that transmits the generated search packet to the at least one master device (col. 1, lines 52-67); and

an address notifier that transmits the unique address of the at least one master device to all home appliances connected to the network (col. 1, lines 55-67, col. 2, lines 5-10).

9. Regarding **claim 3**, Heitkamp et al teach the network system as set forth in claim 2, wherein the address notifier comprises: a plug-in notifier that notifies all home appliances connected to the network of the Unique address of the at least one master device when the unique address is searched and is found for the at least one master device (col. 1, lines 55-67); and a specific address notifier that automatically generates a specific address when the search of the unique address is not successful and transmits a specific address notification packet for the notification of the generated specific address to all home appliances connected to the network (abstract, col. 1, lines 40-51, lines 52-67).

10. Regarding **claim 4**, Heitkamp et al the network system as set forth in claim 3, wherein the specific address notifier automatically generates a specific address when a slave device is additionally connected to the network (col. 5, lines 10-15, lines 48-57) and transmits a specific address notification packet for the notification of the generated specific address to the at least one master device connected to the network (col. 1, lines 40-51, lines 52-67).

11. Regarding **claim 5**, Heitkamp et al teach the network system as set forth in claim 2, wherein the network manager further comprises:
a counter connected to the search packet transmitter that counts the number of attempts to search for the unique address associated with the at least one master device (col. 3, lines 34-44).

12. Regarding **claim 6**, Heitkamp et al the network system as set forth in claim 5, wherein the counter comprises: a comparator/determinator that determines when the search of the unique address corresponding to the at least one master device unsuccessful, when the number of attempted searches exceeds a predetermined number of searches (abstract, col. 1, lines 28-35); and
a specific address requestor that outputs a control signal to request the specific address notifier to automatically generate a specific address when the address search is

Art Unit: 2109

determined by the comparator/determiner to be unsuccessful (col. 1, lines 28-35, lines, 42-51).

13. Regarding **claim 7**, The network system as set forth in claim 2, wherein the network manager further comprises:

a data packet transmitter that generates a data packet containing state information of existing master and slave devices connected to the network and transmits the generated data packet to an additionally connected at least one master device (col. 1, lines 60-67) and an existing at least one master device, when the at least one master device is additionally connected to the network with which the existing at least one master device has already been connected (col. 1, lines 40-51).

14. Regarding **claim 8**, Heitkamp et al teach a method of operating a network system connected with one or more master devices (abstract), comprising:

(a) connecting a new master device to a network with which a plurality of slave devices are connected (abstract, fig. 2);

(b) searching for a unique address associated with the master device (col. 1, lines 40-51); and

(c) notifying all home appliances connected to the network that the master device having the unique address has been appropriately connected to the network (col. 3, lines 63-67, col. 4, lines 1-4).

15. Regarding **claim 10**, Heitkamp et al teach a method of operating a network system connected with one or more master devices (abstract), comprising:

(a) connecting a new home appliance to a network with which a plurality of slave devices and an existing master device have been connected (fig. 2, col. 3, lines 63-67, col. 4, lines 1-4);

(b) notifying at least one of the home appliances that the new home appliance has been connected to the network by transmitting a unique address assigned to the new home appliance to the at least one of the home appliances connected to the network (col. 1, lines 52-67, col. 2, lines 5-10);

(c) determining whether the new home appliance is a master device and transmitting, to the new home appliance, a data packet containing state information of at least one of the home appliances connected to the network when the new home appliance is the master device (col. 4, lines 24-32); and

(d) transmitting the data packet to the existing master device when the existing master device connected with the network is used along with the new master device (col. 1, lines 52-67).

16. Regarding **claim 11**, Heitkamp et al teach the method as set forth in claim 10, wherein determining further comprises:

notifying the additionally connected slave device of the unique address of the master device connected to the network when a slave device is additionally connected to the network (col. 5, lines 10-15, lines 48-57).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

19. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Heitkamp et al (US 6,970, 961) as applied to claim 8 above, further in view of Jeffries (US 6,009,479).

20. Regarding **claim 9**, Heitkamp et al teach the limitation of claim 8 for the above reason, but **do not teach** assigning the generated specific address to the master device when search of the unique address is unsuccessful.

21. However the combination of Heitkamp et al and Jeffries teach the method of claim 8, wherein notifying further comprises:

Art Unit: 2109

(b-1) repeating a search of the unique address associated with the master device (Heitkamp: col. 1, lines 40-51); automatically generating a specific address and assigning the generated specific address to the master device when the search of the unique address is unsuccessful (Jeffries: abstract, col. 2, lines 16-25).

22. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Heitkamp et al and Jeffries teaching for network system with multiple master and slave devices where network manager is capable of automatically assigning unique address to devices. It is advantageous because by automatically assigning address the network manager will only have to identify hardware rather than address identification (Jeffries: col. 4, lines 37-40).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aiello et al (US 7,031,294) teach baseband wireless network for isochronous communication. Barber et al. (US 6,865,596) teach method and system for operating virtual devices by master controllers in a control system. Hiles (US 5,754,799) teaches system and method for bus contention resolution.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umar Cheema whose telephone number is 571-270-3037. The examiner can normally be reached on 7:30AM-5:00PM M-F.

Art Unit: 2109

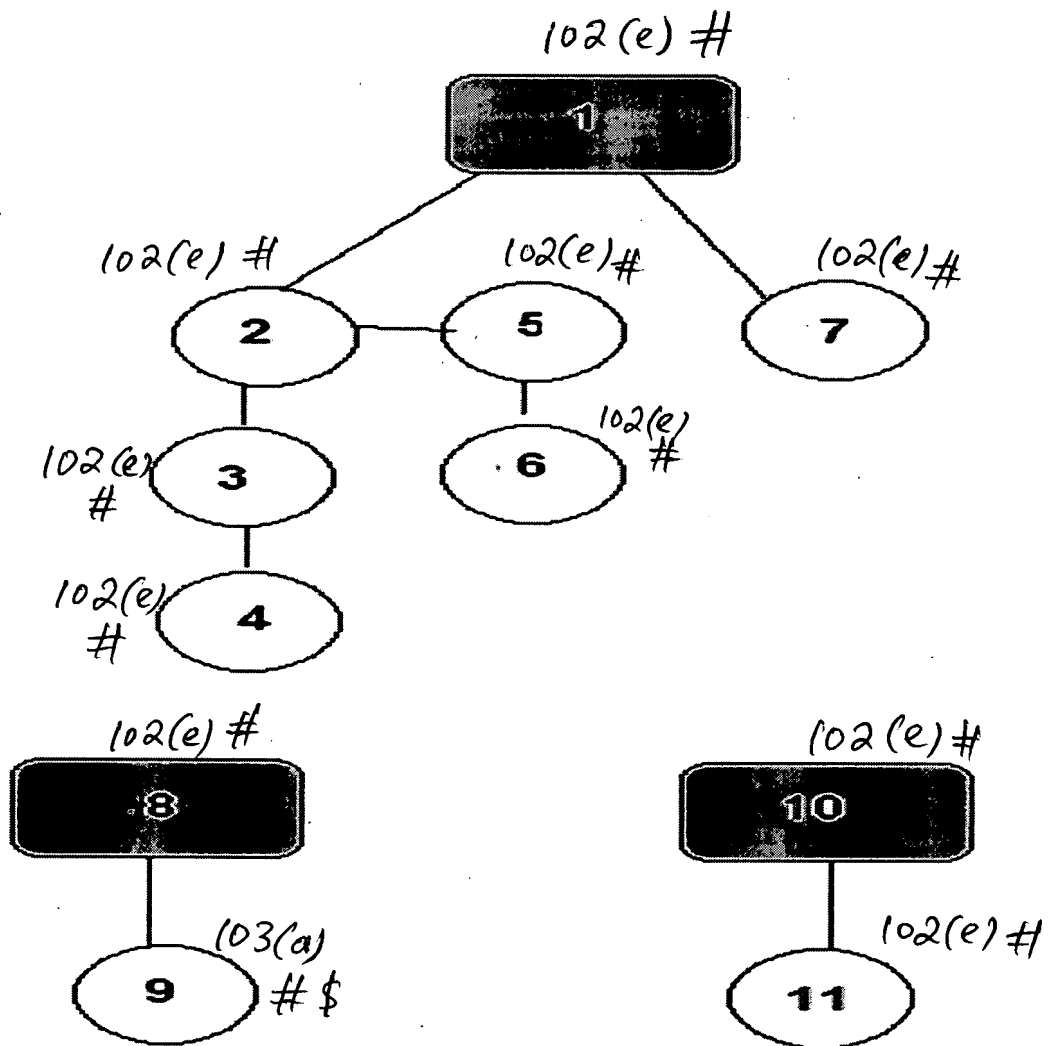
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

uc

A handwritten signature in black ink, appearing to read 'Patrick Assouad', with a stylized flourish at the end.

**PATRICK ASSOUD
SUPERVISORY PATENT EXAMINER**



Heitkamp et al.	#
Jeffries	\$